

Supplemental digital content 3: Patient and clinical characteristics and treatments for SARS-CoV-2 positive children presenting with and without PIMS-TS phenotype

Characteristic or intervention	PIMS-TS N=17 children	Non-PIMS-TS N=56 children
Location of first PICU admission, n(%)		
London	12 (70.6)	27 (48.2)
Rest of England	4 (23.5)	26 (46.4)
Devolved nations	1 (5.9)	3 (5.4)
Age group at first PICU admission, n(%)		
Neonate <30 days	0 (0.0)	5 (8.9)
Infant 31-365 days	0 (0.0)	9 (16.1)
Young child 1y-5y	2 (11.8)	8 (14.3)
Older child 6-12y	9 (52.9)	16 (28.6)
Teenager 13-18y	6 (35.3)	18 (32.1)
Male, n(%)	11 (64.7)	33 (58.9)
Ethnicity, n(%)		
White	6 (35.3)	21 (37.5)
Asian	5 (29.4)	17 (30.4)
Black	4 (23.5)	12 (21.4)
Other	2 (11.8)	3 (5.4)
Mixed	0 (0.0)	3 (5.4)
Weight z score		
n(%)	15 (88.2)	50 (89.3)
Mean (SD)	1.0 (1.64)	0.1 (2.13)
Median (IQR)	0.68 (-0.22, 2.31)	-0.09 (-1.14, 1.62)
Townsend deprivation index score		
n(%)	17 (100.0)	56 (100.0)
Mean (SD)	2.7 (4.09)	2.7 (4.07)

Median (IQR)	2.44 (0.84, 5.83)	3.61 (-1.04, 6.41)
Unplanned admission, n(%)	17 (100.0)	52 (92.9)
Admitted from, n(%)		
Same hospital	1 (5.9)	28 (50.0)
Other hospital	16 (94.1)	28 (50.0)
Comorbidity††, n(%)		
Neurological/Developmental‡	3 (17.6)	15 (26.8)
Congenital Heart/Cardiac Disease	0 (0.0)	9 (16.1)
Inherited genetic/chromosomal abnormalities	0 (0.0)	9 (16.1)
Pre-term	0 (0.0)	8 (14.3)
Malignancy†	1 (5.9)	2 (3.6)
Chronic Pulmonary Disease	1 (5.9)	1 (1.8)
Metabolic/Endocrine**	0 (0.0)	3 (5.4)
PIM3_POD %		
Mean (SD)	3.4 (2.51)	4.9 (7.56)
Median (IQR)	1.91 (1.39, 5.02)	3.17 (1.23, 5.88)
Maximum respiratory support ‡, n(%)		
High frequency invasive ventilation	0 (0.0)	3 (5.4)
Invasive ventilation	7 (41.2)	35 (62.5)
Non-invasive ventilation	2 (11.8)	3 (5.4)
HFNCT	3 (17.7)	2 (3.6)
None	5 (29.4)	13 (23.2)
Invasive ventilation		
Total length‡ of invasive ventilation in PICU (days)		
n(%)	7 (41.2)	38 (67.9)
Mean (SD)	5.9 (4.91)	15.3 (31.74)
Median (IQR)	4 (2-9)	6 (3-12)
Respiratory support		
Total length‡ of respiratory support in PICU (days)		
n(%)	10 (58.8)	40 (71.4)

Mean (SD)	5.0 (4.24)	15.3 (31.6)
Median (IQR)	3.5 (2-7)	5.5 (3-11.5)
Vasoactive support		
Total length‡ of vasoactive support in PICU (days)		
n(%)	13 (76.5)	24 (42.9)
Mean (SD)	6.0 (5.43)	6.7 (8.12)
Median (IQR)	4 (3-7)	4.5 (3-5.5)
Inhaled nitric oxide‡, n(%)	1 (5.9)	6 (10.7)
Renal replacement therapy‡, n(%)	1 (5.9)	3 (5.4)
Extracorporeal life support‡, n(%)	2 (11.8)	1 (1.8)
Medications††, n(%)		
No medications recorded	1 (5.9)	10 (17.9)
Antiviral	2 (11.8)	9 (16.1)
Remdesivir	2 (11.8)	6 (10.7)
Lopinavir with ritonavir	0 (0.0)	2 (3.6)
Oseltamivir	0 (0.0)	1 (1.8)
Inhaled interferon beta-1a	0 (0.0)	0 (0.0)
Antibiotic	6 (35.3)	32 (57.1)
Co-amoxiclav	3 (17.7)	12 (21.4)
Azithromycin	1 (5.9)	13 (23.2)
Clarithromycin	2 (11.8)	8 (14.3)
Piperacillin with tazobactam	1 (5.9)	8 (14.3)
Gentamicin	1 (5.9)	1 (1.8)
Ciprofloxacin	0 (0.0)	1 (1.8)
Immune Modulator	14 (82.4)	8 (14.3)
Intravenous immunoglobulin	11 (64.7)	3 (5.4)
Dexamethasone (excluding for extubation)	2 (11.8)	4 (7.1)

Anakinra	2 (11.8)	0 (0.0)
Tocilizumab	1 (5.9)	1 (1.8)
Hydroxychloroquine	0 (0.0)	1 (1.8)
Outcome, n(%)		
Discharged alive	16 (94.1)	50 (89.3)
Died in PICU	1 (5.9)	6 (10.7)
Total length ^λ of PICU care (days)*		
n(%)	17 (100.0)	56 (100.0)
Mean (SD)	6.2 (6.20)	13.2 (27.07)
Median (IQR)	4.0 (2.5-7.3)	5.1 (2.8-11.6)

PIMS-TS = Pediatric multisystem inflammatory syndrome temporally associated with COVID-19; IQR =

interquartile range; PIM3_POD = pediatric index of mortality 3 predicted probability of death; †† not mutually exclusive; ‡ Neurological/developmental including autism, epilepsy, cerebral palsy; ** Metabolic/endocrine including diabetes; † malignancy including leukaemia, lymphoma, solid tumours; ‡ where a child had multiple admission events the number of days is summed across all events for calculations; λ where a child had multiple admission events the status from the last recorded admission is presented; * for completed PICU care episodes.